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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PATRICK J. O'DONNELL

Appeal 2009-013836
Application 09/557,234
Technology Center 3600

Before ROBERT A. CLARKE, CHARLES N. GREENHUT and
MICHAEL L. HOELTER, *Administrative Patent Judges*.

CLARKE, *Administrative Patent Judge*.

DECISION ON APPEAL

A. Statement of the Case

Patrick J. O'Donnell seeks review under 35 U.S.C. § 134(a) of a rejection mailed September 24, 2004. An oral hearing was held on September 14, 2011. A transcript of the hearing was mailed on October 7, 2011.

The application was filed on April 24, 2000.

Claims 19-28 and 33-40 are on appeal. Claims 1-18 and 29-32 have been cancelled. App. Br. 4.¹ We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

The following prior art has been cited by the Examiner:

Arnold	U.S. Patent 3,737,105	5 June 1973
Guo	U.S. Design Patent 425,603	23 May 2000
Kimbrew-Walter Roses (Jet-All)	Jet-All brochure	Undated ²

¹ All references to App. Br. are to the supplemental corrected appeal brief received on February 5, 2007.

² Appellant has not contested the prior art status of the Jet-All brochure which was cited by Appellant in the Information Disclosure Statement which accompanied the original application on filing on April 24, 2000.

B. Findings of Fact

The following findings of fact are supported by a preponderance of the evidence.

Field of the Invention

The Appellant's claimed invention relates to a method for dislodging insects from and simultaneously cleaning plants. Spec.³ 3, ll. 16-17.

Description of the Invention

The Appellant's invention is a method that includes providing a substantially straight handle portion, a substantially straight distal portion, a bend point between the handle and distal portion. A nozzle adapted to direct a flow of pressurized water to create a substantially planar wall of water directed outwardly about the circumference of the nozzle is provided at the generally distal end. The handle portion is adapted to be connected to a pressurized source of water. The method includes positioning the nozzle adjacent to the underside of a leaf and advancing and retracting the nozzle while maintaining the nozzle in a generally horizontal attitude. The user rotates the handle while maintaining the nozzle in a generally horizontal attitude and then insert and retract the nozzle to remove insects and clean other leaves. Spec. 3, l. 16 – 4, l. 2; Claim 36.

³ All references to Spec. are to Appellant's Specification filed April 24, 2000.

Claims on Appeal

Independent claim 36 reads [bracketed matter and emphasis added and some indentation added]:

36. A method of removing insects from and cleaning an interior portion of a leafy plant having a first region and a second region that are disposed at different vertical elevations, comprising:

[1] providing a hand held spraying apparatus having a handle, an elongate body having a length of at least about one foot, and a nozzle at a distal end of the elongate body, the nozzle configured to direct a flow of water outwardly generally around a longitudinal axis of the nozzle portion, the nozzle portion fixedly connected to the handle and being configured to move with the handle;

[2] placing the spraying apparatus into communication with a source of water under pressure;

[3] while maintaining the nozzle axis in a generally horizontal attitude, repeatedly advancing and retracting the nozzle into and out of the interior portion of the plant at a plurality of locations in the first region so that water flow is directed onto undersides of interior leaves of the plant and top sides of interior leaves of the plant;

[4] rotating the apparatus about the handle at least about 90° to change the elevation of the nozzle axis from a position in the first region to a position in the second region without substantially changing its generally horizontal attitude; and
[5] advancing and retracting the nozzle into and out of the interior portion of the plant at a plurality of locations in the second region.

Claim 19, the other independent claim, adds that the nozzle directs water flow around substantially the entire circumference of the nozzle axis and that the nozzle remains horizontally disposed when advanced and

retracted in the second elevation, but does not require that the tops of leaves be impacted by the spray.

Examiner's Rejections

In the Examiner's Answer, the Examiner maintained the rejection of claims 36-38 under 35 U.S.C. § 103(a) as being unpatentable over Guo and Jet-All. Ans. 3.⁴ In the Examiner's Answer, the Examiner also maintained the rejection of claims 19-28, 33-35, 39 and 40 under 35 U.S.C. § 103(a) as being unpatentable over Arnold, Guo and Jet-All. Ans. 5.

Prior Art

(1) Arnold

Arnold describes a nozzle for cleaning surfaces by ejecting pressurized fluid radially outward from the nozzle uniformly around the periphery of the nozzle. Arnold 1, ll. 4-5, and 12-13.

(2) Guo

Guo illustrates a hand-held spray device having a handle at a first end, a nozzle at an opposite end and a bend in a shaft intermediate the handle and nozzle.

(3) Jet-All

Jet-All describes a hand-held spraying apparatus having a handle at one end, a nozzle at the opposite end, three nozzle heads for directing a spray of water towards the underside of leaves and a shaft connecting the handle and nozzle which includes at least two bends. The Examiner made

⁴ All references to Ans. are to the Answer dated September 25, 2009.

findings that the longitudinal axis of the nozzle of Jet-All is generally horizontally disposed when spraying the underside of the leaf and when the nozzle is advanced and retracted. Ans. 4. The Examiner made additional findings that the claimed orientations would be achieved during routine spraying in order to cover an entire bush as one of a variety of orientations and that one of ordinary skill in the art would position and rotate the device as recited in order to apply full coverage of vegetation of various shapes and sizes and also to compensate for obstacles such as fences that may be located near the bush. Ans. 9-10.

Appellant's Arguments

- I. Appellant argues that Guo's nozzle directs water generally along the nozzle axis while claim 36 requires a nozzle configured to direct a flow of water outwardly generally around a longitudinal axis of the nozzle portion. App. Br. 18; Rep. Br. 4.
- II. In response to the Examiner's finding that Jet-All inherently describes that the longitudinal axis of the nozzle of Jet-All is generally horizontally disposed when spraying the underside of the leaf and when the nozzle is advanced and retracted, Appellant argues:

With reference again to the above figures reproduced from the Jet-All brochure, the Jet-All brochure shows the device being used such that an axis of the nozzle is at a substantial angle, clearly more than 45°, from horizontal. Perhaps Jet-All is capable of being used at other angles, but it is always shown in an attitude in which the nozzles are oriented to direct spray upwardly from the nozzle and away from the user. In fact, as apparent from the Jet-All sketch, if the Jet-All device is to be truly oriented so that the nozzle axis is generally horizontal, the handle of the device will necessarily be lower than the nozzle when the nozzle sprays upwardly. App. Br. 18.

III. Appellant argues that neither Guo nor Jet-All explicitly describe nor teach or suggest the recited step of “rotating the apparatus about the handle at least about 90° to change the elevation of the nozzle axis from a position in the first region to a position in the second region without substantially changing its generally horizontal attitude”. App. Br. 19. Moreover, appellant argues that the Examiner has not correctly applied the doctrine of inherency. App. Br. 20-21; Rep. Br. 5.

IV. Appellant argues that even if Guo and Jet-All were combined that one skilled in the art would not necessarily recognize or wish to perform the claimed method, except based on a reading of Appellant’s specification. App. Br. 22.

V. Appellant argues that no motivation to combine was articulated by the Examiner in making the rejection based on the combination of Arnold, Guo and Jet-All and that therefore the combination was improper. App. Br. 24-25.

VI. Appellant argues that combining Guo and Arnold or Arnold alone with Jet-All would result in nozzle directed towards the user, which Jet-All teaches is undesirable. App. Br. 26.

VII. Appellant argues that the Examiner’s assertion of inherency based on Arnold as modified by Jet-All were substantially the same as those in connection with Claims 36-38 and fail for the same reasons. App. Br. 26-27.

VIII. Appellant argues that the evidence of long felt need rebuts any prima facie evidence of obviousness. App. Br. 27; Rep. Br. 7.

C. Issues

Has the Appellant shown that the Examiner erred in finding that Guo and Jet-All or Arnold, Guo and Jet-All suggests to one of ordinary skill in the art to dispose a longitudinal axis of a nozzle generally horizontally when spraying the underside of the leaf and when the nozzle is advanced and retracted in view of the teachings of Guo and Jet-All or the teachings of Arnold, Jet-All and Guo?

Has the Appellant shown that the Examiner erred in finding that Guo and Jet-All or Arnold, Guo and Jet-All suggests to one of ordinary skill in the art to dispose a longitudinal axis of a nozzle generally horizontally when rotating the device at least about 90 degrees and then inserting the nozzle at a second elevation?

Has the Appellant shown that the Examiner erred in finding that Guo's nozzle would provide a flow of water outwardly generally around a longitudinal axis of the nozzle portion?

D. Discussion

Appellant argues claims 36-38 as a group and claims 19-28, 33-35 39 and 40 as a second group. App. Br. 16-27. Thus, we select claims 19 and 36 as representative claims and claims 20-28, 33-25, 39 and 40 will stand or fall with claim 19 and claims 37 and 38 will stand or fall with claim 36.

The Examiner found that Guo discloses a spraying apparatus that meets the structural limitations of independent claim 36. Ans. 3. The Examiner found that the structural limitations of claim 19 would have been obvious in view of Arnold and Guo. Ans. 5. The Examiner also found that Guo fails to disclose performing the claimed method with Guo's spraying

apparatus, including removing insects from and cleaning a plant having leaves. Ans. 4.

The Examiner further found, “‘Jet-All’ teaches using a spraying apparatus by positioning the nozzle adjacent an underside of a plant leaf so that a portion of the water directed by the nozzle impacts the underside of the leaf and the longitudinal axis of the nozzle is generally horizontally disposed at a first elevation and advancing and retracting the nozzle generally horizontally.” Ans. 4. While the Examiner initially relies on a theory of inherency, the Examiner, in responding to Appellant’s arguments, asserts that “Furthermore, examiner maintains that is obvious that during routine spraying in order to inherently cover the entire bush applicant’s claimed orientation would be achieved” Ans. 9. Regarding the step of rotating the apparatus while maintaining the longitudinal axis of the nozzle generally horizontally disposed, as recited in claims 19 and 36, the Examiner does not cite to any particular portion of Guo or Jet-All. Rather, the Examiner found “Guo as modified inherently teaches rotating the apparatus at least about 90 degrees so that the longitudinal axis of the nozzle is moved to a second elevation but remains generally horizontally disposed during rotation and advancing and retracting the nozzle generally horizontally at the second elevation to efficiently and effectively treat all size plants.” Ans. 4. While the Examiner initially relies on a theory of inherency, the Examiner, in responding to Appellant’s arguments, asserts that “At some point during the rotation to thoroughly cover the vegetation it would be obvious to achieve the claimed orientation....It is obvious to orient a device in a desired manner to fit the space constraints of the situation. Orientation of the wand would depend on the size and shape of the vegetation” Ans. 9-10.

Accordingly we find the Examiner to have advanced alternative grounds of inherency and obviousness with regard to the steps of maintaining the nozzle in an horizontal orientation both when advanced and retracted from the plant and when moving the device at least 90 degrees so that the nozzle is disposed at a different elevation.

Contention I. The Appellant contends that the Examiner found that Figure 6 of Guo contains a series of apertures in circular orbits surrounding the center of the face of the nozzle and thus the apertures of Guo emit the spray directing the water in a parallel direction of the longitudinal axis and thus direct the water outwardly generally around the longitudinal axis as recited in claim 36. App. Br. 18. Appellant argues that “outwardly” cannot include parallel, longitudinally directed streams and still satisfy the claim, which also requires that the water flow be directed onto undersides of interior leaves of the plant and top sides of interior leaves of the plant. Rep. Br. 4. The Examiner found that apertures of Guo are disposed in circular orbits surrounding the center of the face of the nozzle and emit spray in a parallel direction relative to the longitudinal axis of the nozzle. The Examiner found that Guo’s pattern of spray would be directed outwardly generally around the longitudinal axis as recited in claim 36. Appellant’s specification describes water flow in the embodiment of Figure 1 as directing

each wall of water W preferably comprises a water flow direct outwardly from the nozzle around substantially the entire circumference of the nozzle 30 **and in a direction substantially perpendicular** to a longitudinal axis 42 of the nozzle 30

Spec. 6, l. 30 – 7, l. 1 (emphasis added). Similarly the specification described that sprays angled 25 degrees from a plane perpendicular to the nozzle would create many advantages. Spec. 8, ll.20-27. In claim 36, Appellant defined how the water was directed outwardly generally around a longitudinal axis of the nozzle without reciting the limiting language that the direction be substantially perpendicular to a longitudinal axis of the nozzle or be within 25 degrees of the plane that is perpendicular to the longitudinal axis of the nozzle or that the water is directed outwardly from the axis. In Claim 19, Appellant defined that the nozzle is adapted to direct water outwardly from the axis around substantially the entire circumference of the nozzle axis. Claim 36 does not require that the water be directed outwardly from any specific item or axis. Thus, it is appropriate to construe the limitation “the nozzle configured to direct a flow of water outwardly generally around a longitudinal axis” as not limited to water being directed away from the axis. Given the breadth of claim 36 as compared to the preferred embodiments of the specification on which Appellant’s construction is based and claim 19, we find the Examiner’s construction to be correct. We note that portions of individual plant leaves are often disposed at various elevations, see the three photographs of Jet-All, thus, in use water that is directed in Guo would necessarily be directed onto undersides of some interior leaves of the plant and top sides of some interior leaves. Accordingly, Appellant has not persuaded us that the Examiner erred in construing the limitation “the nozzle configured to direct a flow of water outwardly around a longitudinal axis of the nozzle portion.”

Contentions II-V and VII. Although we agree with Appellant that the Examiner reliance on theories of inherency and intended use is misplaced

(App. Br. 2-3), we agree with the Examiner's ultimate conclusion that the claimed subject matter would have been obvious to one having ordinary skill in the art. The Examiner determined that one of ordinary skill would have further modified the combination to achieve the horizontal orientation both when advanced and retracted from the plant and when moving the device at least 90 degrees so that the nozzle is disposed at a different elevation in order to apply full coverage. As appreciated by Appellant, Jet-All implicitly teaches advancing and retracting a number of times in order to control insects on different parts of the plant. Transcript 11, ll. 9-19. The number of times the Jet-All device would be advanced or retracted from a plant, or plants, and the particular orientation and path the device takes, depends on the level of insect control needed, the location and resilience of the insects and the pressure and direction of the discharged water. . In making this determination, the Examiner properly relied on logic and common sense available to one of ordinary skill. *Perfect Web Tech., Inc. v. InfoUSA, Inc.*, 587 F.3d 1324, 1329 (Fed. Cir. 2009) ("while an analysis of obviousness always depends on evidence ... it also may include recourse to logic, judgment, and common sense available to the person of ordinary skill that do not necessarily require explication in any reference"). Appellant does not discuss the reasons articulated by the Examiner as to why using prior art devices in the manner claimed would have been obvious. Appellant therefore has not provided persuasive arguments as to why those reasons lack rational underpinning.

Contention V and VI. We are not persuaded that one skilled in the art in considering the teaching of Arnold, Jet-All and Guo would direct spray onto the user are argued by Appellant in Contention VI. Arnold describes a

nozzle that ejects fluid outward from the nozzle uniformly around the periphery of the nozzle in a double radial spray for washing surfaces where a wide radial spray is desired. Arnold 1, ll. 4-5, 12-13, and 23-26. In use, the Arnold nozzle directs water about ninety degrees from the horizontal. Transcript 5, ll. 8-10⁵. Arnold does not disclose a handle. Appellant contends Arnold contemplates no reason to dispose its nozzle on Guo's device. App. Br. 26. However, Appellant's argument does not address the reasons articulated by the Examiner that such a modification would improve ergonomics—in that it would facilitate holding the device, and it is known to increase reach while delivering water. Ans. 5-6. We agree with the Examiner that such a modification would have been obvious to one having ordinary skill in the art. *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 417 (2007).

Our discussion of nozzle movement regarding the rejection based on Guo and Jet-All also applies to the rejection based on Arnold, Guo and Jet-All. When using Arnolds' nozzle, maintenance of a horizontal nozzle orientation would provide the additional advantage of avoiding spray back on the user.

Appellant, in contention VIII, asserts that there is evidence of secondary indicia of non-obviousness that is sufficient to overcome any prima facie showing of obviousness made in either the rejection of claim 19 or 36. Accordingly, we consider the issue of obviousness under 35 U.S.C. § 103 anew, by carefully evaluating and weighing both the evidence relied

⁵ All references to Transcript are to the Transcript of the Oral Hearing mailed on October 7, 2011.

upon by the examiner in making the rejections and the objective evidence of non-obviousness provided by Appellant.

Establishing long-felt need requires objective evidence that an art-recognized problem existed in the art for a long period of time without solution. The relevance of long-felt need and the failure of others to the issue of obviousness depends on several factors. First, the need must have been a persistent one that was recognized by those of ordinary skill in the art. *In re Gershon*, 372 F.2d 535, 539 (CCPA 1967) (“Since the alleged problem in this case was first recognized by appellants, and others apparently have not yet become aware of its existence, it goes without saying that there could not possibly be any evidence of either a long felt need in the . . . art for a solution to a problem of dubious existence or failure of others skilled in the art who unsuccessfully attempted to solve a problem of which they were not aware.”); *Orthopedic Equip. Co., Inc. v. All Orthopedic Appliances, Inc.*, 707 F.2d 1376 (Fed. Cir. 1983) (Although the claimed invention achieved the desirable result of reducing inventories, there was no evidence of any prior unsuccessful attempts to do so.).

Second, the long-felt need must not have been satisfied by another before the invention by applicant. *See Newell Companies v. Kenney Mfg. Co.*, 864 F.2d 757, 768 (Fed. Cir. 1988) (Although at one time there was a long-felt need for a “do-it-yourself” window shade material which was adjustable without the use of tools, a prior art product fulfilled the need by using a scored plastic material which could be torn.). “[O]nce another supplied the key element, there was no long-felt need or, indeed, a problem to be solved.” *Id.*

Third, the invention must in fact satisfy the long-felt need. *See In re Cavanagh*, 436 F.2d 491 (CCPA 1971). Manual of Patent Examining Procedure § 716.04.

According to Appellant, the long-felt need and failure of others pertains to resolving how to remove insects from plants without using pesticides. App. Br. 30. The cited Jet-All reference discloses a solution to organically control insects by directing sprays of water to the leaves of rose plants in need of insect control. Moreover, the Jet-All reference is materially different from the spray nozzle prior art that was used in comparing Appellant's invention in the evidence of long-felt need as it allows for the user to direct the spray using the handle disposed apart from the nozzle. Further, favorable reviews from product testers do not demonstrate that there existed a long-felt but unresolved need or that there was a failure of others.

On the totality of the evidence, weighing all evidence of obviousness against all evidence of non-obviousness, we hold the evidence of obviousness outweighs the evidence of non-obviousness. We therefore do not find error in the Examiner's rejections.

DECISION

The rejections of claims 36-38 under 35 U.S.C. § 103(a) as being unpatentable over Guo in view of Jet-All and of claims 19-28, 33-35, 39 and 40 over Arnold, Guo and Jet-All are affirmed.

Appeal 2009-013836
Application 09/557,234

AFFIRMED

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